

**DATE:** 3/27/00 (Supersedes Service Letter SL-210-014 dated 12/21/99)

**TO:** DEALERS/SUBSIDIARIES  
DISTRICT/REGIONAL SERVICE MANAGERS

**FROM:** DEALER SERVICES

**SUBJECT:** LOW NOx REBUILD KIT

In compliance with the recent agreement between Mack Trucks, Inc. and the Environmental Protection Agency (EPA), Mack Trucks, Inc. is notifying rebuilders of MACK and RENAULT VI manufactured engines of certain requirements that must be performed during rebuild of certain MACK and RENAULT VI engines. Engines covered by the agreement are certain MACK manufactured electronically controlled E7 and E-Tech™ engines manufactured between January 1, 1994 and September 22, 1998, engine serial numbers 4B through 8R. Attached is a list of E7 and E-Tech engine models with their assigned V-MAC® data file part numbers. If an engine model and its assigned V-MAC data file part number appear on the list, that engine is included in the agreement.

Certain RENAULT VI manufactured MIDR 06.02.26 engines included were manufactured between January 1, 1993 and October 31, 1998. RENAULT VI MIDR 06.02.26 L2 engines are not included in the agreement

The following are guidelines by engine model that determine if an engine rebuild is covered by the requirements of the agreement with the EPA.

### **RENAULT VI MIDR 06.02.26 Engine Models**

Engines with less than 185,000 miles (297 850 km) at the time of overhaul in which two or more cylinder components are replaced in all six cylinders, and engines with more than 185,000 miles (297 850 km) at the time of overhaul in which two or more cylinder components were replaced in four or more cylinders. Cylinder components are defined as follows:

- Piston assemblies
- Piston ring assemblies
- Connecting rods
- Cylinder liners

RENAULT VI engines rebuilt under the above definition MUST have a LOW NOx Rebuild Kit installed before the engine is returned to service. The LOW NOx Rebuild Kit consists of

a data file change and an engine label (part No. 4MR21066). This label is available through the MACK Parts System. After the data file change, the label included with the kit MUST be completed with the date of the data file change and the code of the MACK dealer where the data file was changed. The completed label MUST be installed on the valve cover next to the existing emission sticker before the engine is returned to service.

### **MACK E7 V-MAC® II and E-Tech™ Electronically Controlled Engine Models**

Engines with less than 290,000 miles (466 900 km) at the time of overhaul in which two or more cylinder components are replaced in all six cylinders, and engines with more than 290,000 miles (466 900 km) at the time of overhaul in which two or more cylinder components were replaced in four or more cylinders. Cylinder components are defined as follows:

- Piston assemblies
- Piston ring assemblies
- Connecting rods
- Cylinder liners

E7 and E-Tech engines rebuilt under the above definition MUST have a LOW NOx Rebuild Kit installed before the engine is returned to service. The LOW NOx Rebuild Kit consists of a data file change and an engine label (part No. 4MR21066). This label is available through the MACK Parts System. After the data file change, the label MUST be completed with the date of the data file change and the code of the MACK dealer where the data file was changed. The completed label MUST be installed on the valve cover next to the existing emission sticker before the engine is returned to service.

### **Short Blocks and Basic Engine Assemblies**

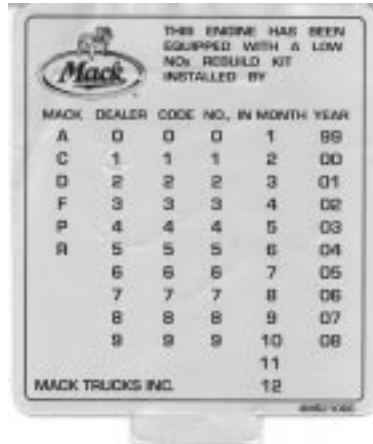
When replacing a MACK or RENAULT VI engine covered by the LOW NOx Rebuild agreement with either a short block or a basic engine, the instructions included with the short block or basic engine must be followed. The engine MUST have a LOW NOx Rebuild Kit installed before the engine is returned to service. The LOW NOx Rebuild Kit consists of a data file change and an engine label (part No. 4MR21066). This label is available through the MACK Parts System. After the data file change, the label MUST be completed with the date of the data file change and the code of the MACK dealer where the data file was changed. The completed label MUST be installed on the valve cover next to the existing emission sticker before the engine is returned to service.

### **Non-MACK Affiliated Engine Rebuilders**

When a non-MACK affiliated engine rebuilder has rebuilt a MACK or RENAULT VI engine covered by the LOW NOx Rebuild agreement, the engine must be brought to an authorized MACK dealer to have the LOW NOx Rebuild Kit installed before the engine is returned to service. The LOW NOx Rebuild Kit consists of a data file change and an engine label (part No. 4MR21066). This label is available through the MACK Parts System. After the data file change, the label MUST be completed with the date of the data file change and the code of the MACK dealer where the data file was changed. The completed label MUST be installed on the valve cover next to the existing emission sticker before the engine is returned to service.

## Low NOx Engine Rebuild Label

As part of the Low NOx Rebuild Program, an engine label identifying the installing MACK dealer and date of installation must be completed and affixed to the valve cover before the engine is returned to service. Order the label (part No. 4MR21066) from the MACK Parts Distribution Center normally serving your area. Complete the label by punching out the dealer code and the month and year that the Low NOx Rebuild Kit was installed, then peel the backing from the label and affix it to the valve cover next to the existing engine emission label. Before installing the label, be sure to clean any grease and oil from the area of the valve cover where the label will be installed.



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Figure 1 — Low NOx Engine Rebuild Label

## Reimbursement

Recovery of labor expense for installing rebuild kits is through normal MACK warranty claim procedures. The following information must be entered on the claim:

### UNDER

### ENTER

Failed Part Number.....	Low NOx
230 9A 2R 80.....	0.7 hr. Time for installation of Low NOx Rebuild Kit.

Claims may be filed for installation of the rebuild kit for engines rebuilt by authorized MACK dealers or engines rebuilt by non-MACK affiliated rebuilders.

## Engines Included in the Low NOx Rebuild Program

Engine Model	V-MAC Data File Part Numbers
EM7-275	1MS571P2
EM7-300	1MS536P18, 1MS536P3, 1MS541P3, 1MS543P3, 1MS548P3, 1MS549P3, 1MS550P3, 1MS559P3, 1MS568P3, 1MS571P3, 1MS585P3
E7-300	1MS571P14, 1MS571P15, 1MS571P4
E7-310/330	1MS571P12
E7-330/350	1MS548P11, 1MS559P11, 1MS571P11, 1MS585P11
E7-350	1MS536P17, 1MS536P20, 1MS536P6, 1MS541P6, 1MS543P6, 1MS548P6, 1MS549P6, 1MS557P6, 1MS559P6, 1MS550P6, 1MS557P19, 1MS561P6, 1MS568P6, 1MS571P6, 1MS577P6, 1MS585P6, 1MS588P6
E7-355/380	1MS548P13, 1MS559P13, 1MS568P13, 1MS571P13, 1MS585P13, 1MS588P13
E7-400	1MS536P7, 1MS541P7, 1MS543P7, 1MS548P7, 1MS549P7, 1MS557P20, 1MS557P7, 1MS559P7, 1MS585P7, 1MS561P7, 1MS568P7, 1MS571P7, 1MS577P20, 1MS577P7
E7-427	1MS536P8, 1MS543P8, 1MS548P8, 1MS549P8, 1MS559P8, 1MS561P8, 1MS568P8, 1MS571P8, 1MS577P8, 1MS585P8
E7-454	1MS548P9, 1MS550P9, 1MS559P9, 1MS585P9
E7-460	1MS561P9, 1MS568P9, 1MS571P9, 1MS588P9

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### Low NOx Rebuild Data Files

The chart below lists the Low NOx Rebuild Kit data file part numbers available for E-Tech™ engines as of March 27, 2000. Data file part numbers for the remaining engines will be added as they become available.

Engine Model	Low NOx Rebuild Data File Part No.	Previously Used Data File Part No.
EM7-275 E-Tech™	1MS592P2	1MS571P2
EM7-300 E-Tech™	1MS592P3	1MS568P3 1MS571P3
E7-300 E-Tech™	1MS592P4 1MS592P14 1MS592P15	1MS571P4 1MS571P14 1MS571P15
E7-330/350 E-Tech™	1MS592P11	1MS571P11
E7-350 E-Tech™	1MS592P6	1MS561P6 1MS568P6 1MS571P6 1MS588P6

Engine Model	Low NOx Rebuild Data File Part No.	Previously Used Data File Part No.
E7-355/380 E-Tech™	1MS592P13	1MS568P13 1MS571P13 1MS588P13
E7-400 E-Tech™	1MS592P7	1MS561P7 1MS568P7 1MS571P7
E7-427 E-Tech™	1MS592P8	1MS561P8 1MS568P8 1MS571P8
E7-460 E-Tech™	1MS592P9	1MS561P9 1MS568P9 1MS571P9 1MS588P9



The chart below lists Low NOx Rebuild Kit data file part numbers available for E7 V-MAC II engines as of March 27, 2000. Data file part numbers for the remaining engines will be added as they become available.

Engine Model	Low NOx Rebuild Data File Part No.	Previously Used Data File Part No.
E7-350 V-MAC II	1MS599P6 1MS5101P6 1MS5101P19 1MS5102P6 1MS5103P6 1MS5106P6	1MS548P6 1MS557P6 1MS557P19 1MS559P6 1MS577P6 1MS585P6
E7-355/380 V-MAC II	1MS599P13 1MS5102P13 1MS5106P13	1MS548P13 1MS559P13 1MS585P13
E7-427 V-MAC II	1MS599P8 1MS5102P8 1MS5103P8 1MS5106P8	1MS548P8 1MS559P8 1MS577P8 1MS585P8
E7-454 V-MAC II	1MS599P9 1MS5102P9 1MS5106P9	1MS548P9 1MS559P9 1MS585P9

## NOTE

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Before the new data file can be downloaded, it is necessary to have the data file part number for the vehicle changed on the MACK mainframe. To do this, contact the RSM serving your location, or contact Product Support at 610-709-2279. Be prepared to supply the VIN and the new data file part number. For instructions on downloading the new data files, refer to the applicable V-MAC user guide.

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